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NOTICE OF ALLOWANCE AND FEE(S) DUE

33031 7590 08/24/2009

CAMPBELL STEPHENSON LLP
11401 CENTURY OAKS TERRACE
BLDG. H, SUITE 205
AUSTIN, TX 78758

EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT

PAPER NUMBER

2419

DATE MAILED: 08/24/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,307	06/24/2003	Kenneth M. Rose	CIS0199US	9007

TITLE OF INVENTION: SYSTEM AND METHOD FOR SWITCHING HIGH PRIORITY TRAFFIC WITH LOW LATENCY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	11/24/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

33031 7590 08/24/2009
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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/602,307	06/24/2003	Kenneth M. Rose	CIS0199US	9007
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TITLE OF INVENTION: SYSTEM AND METHOD FOR SWITCHING HIGH PRIORITY TRAFFIC WITH LOW LATENCY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	11/24/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEE, ANDREW CHUNG CHEUNG	2419	370-395420

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/602,307	06/24/2003	Kenneth M. Rose	CISO199US	9007
33031	7590	08/24/2009	EXAMINER	
CAMPBELL STEPHENSON LLP 11401 CENTURY OAKS TERRACE BLDG. H, SUITE 250 AUSTIN, TX 78758			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2419	

DATE MAILED: 08/24/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 906 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 906 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/602,307

Applicant(s)

ROSE ET AL

Examiner

Andrew C. Lee

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/11/2009.
2. ☒ The allowed claim(s) is/are 1,2,5,6,9,10,11,32,12,33,34,35; 13,14,17,18,19,20,36,37; 23,38,39; 30,31 renumbered 1 - 25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Andrew C Lee/
Examiner, Art Unit 2419

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2419

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Shawn Doman on 8/11/2009.

2. The application has been amended as follows:

- Claim 1 has been amended as following

1. (Currently Amended) A method comprising:

A line card transmitting a first data stream to a switch fabric, said first data stream having a first priority; ~~and~~

at any time during said transmission, interrupting said transmission of said first data stream;

transmitting a first switch code;

to transmitting a second data stream to said switch fabric, said second data stream having a second priority;

~~at any time during transmission of said second data stream, interrupting said transmission of said second data stream to resume transmission of said first data stream to the switching fabric~~

transmitting a second switch code; and

resuming transmission of said first data stream, wherein

the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first

switch code and that the data preceding the first switch code is the last data of a frame, and

the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame.

- Claim 3 has been cancelled

3. (Cancelled)

- Claim 4 has been cancelled

4. (Cancelled)

- Claim 13 has been amended as following

13. (Currently Amended) An apparatus comprising:

a first buffer configured to store data of a first data stream prior to transmission to a switching fabric, said data of said first data stream having a first priority;

a second buffer configured to store data of a second data stream prior to transmission to the switching fabric, said data of said second data stream having a second priority;

a priority switch circuit coupled to said first buffer and said second buffer, wherein said priority switch circuit is configured to, upon detection of data of said second data stream[[],]:

interrupt a transmission of data of said first data stream from the first buffer at any time during said transmission;

transmit a first switch code, wherein

the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame;
and transmit data of said second data stream from the second buffer[.];
~~and wherein said priority switch circuit is further configured to interrupt said transmission of said second data stream from the second buffer~~

transmit a second switch code, wherein
the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame; and, ~~at any time during said transmission of said second data stream, to resume transmission of said first data stream from the first buffer.~~

- Claim 15 has been cancelled

15. (Cancelled)

- Claim 16 has been cancelled

16. (Cancelled)

- Claim 23 has been amended as following

23. (Currently Amended) An apparatus comprising:
a first buffer configured to store data of a first data stream prior to transmission to a switching fabric, said data of said first data stream having a first priority;
a second buffer configured to store data of a second data stream prior to transmission to the switching fabric, said data of said second data stream having a second priority; and

means for, upon detection of data in said second buffer, interrupting a transmission of said first data stream from the first buffer at any time during said transmission; and

means for transmitting a first switch code, wherein the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame.

means for transmitting said second data stream to the switch fabric from the second buffer;

means for transmitting a second switch code, wherein the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame; and

means for resuming transmission of said first data stream when there is data in the second buffer to transmit, ~~wherein the resuming transmission comprises interrupting, at any time, transmission of said second data stream.~~

- Claim 19 has been cancelled

29. (Cancelled)

- Claim 30 has been amended as following

30. (Currently Amended) An apparatus comprising:

a first buffer configured to store data of a first data stream prior to transmission to a switching fabric, said data of said first data stream having a first priority, wherein said switching fabric is comprised of a first crossbar, wherein said first crossbar is configured to receive said first data stream;

a second buffer configured to store data of a second data stream prior to transmission to said switching fabric, said data of said second data stream having a

second priority, wherein said switching fabric is comprised of a second crossbar, wherein said second crossbar is configured to receive said second data stream; and a priority switch circuit coupled to said first buffer and said second buffer, wherein said priority switch circuit is configured to, upon detection of data of said second data stream[[,]]:

interrupt a transmission of data of said first data stream from the first buffer at any time during said transmission ~~and;~~

transmit a first switch code, wherein the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame; transmit data of said second data stream from the second buffer; ~~and; said priority switch circuit is further configured to interrupt, at any time, transmission of said second data stream to transmit a second switch code, wherein the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame;~~ and resume transmission of said first data stream.

Allowable Subject Matter

3. Claims 1, 2, 5, 6, 9, 10, 11, 32, 12, 33, 34, 35; **13**, 14, 17, 18, 19, 20, 36, 37; **23**, 38, 39; **30**, 31 renumbered 1 – 25 are allowed.

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, fails to disclose explicitly the limitations of:

"a line card transmitting a first switch code; transmitting a second data stream to said switch fabric, said second data stream having a second priority; transmitting a second switch code; and resuming transmission of said first data stream, wherein the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame, and the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame" as disclosed in claim 1;

"transmit a first switch code, wherein the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame; and transmit data of said second data stream from the second buffer; transmit a second switch code, wherein the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame; and resume transmission of said first data stream from the first buffer" as disclosed in claim 13;

"means for, upon detection of data in said second buffer, interrupting a transmission of said first data stream from the first buffer at any time during said transmission; and means for transmitting a first switch code, wherein the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame, means for transmitting said second data stream to the switch fabric from the second buffer; means for transmitting a second switch code, wherein the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the

data preceding the second switch code and that the data preceding the second switch code is the last data of a frame; and means for resuming transmission of said first data stream when there is data in the second buffer to transmit" as disclosed in claim 23;

"transmit a first switch code, wherein the first switch code comprises at least one of an indication that the data following the first switch code has a different priority than the data preceding the first switch code and that the data preceding the first switch code is the last data of a frame; transmit data of said second data stream from the second buffer; transmit a second switch code, wherein the second switch code comprises at least one of an indication that the data following the second switch code has a different priority than the data preceding the second switch code and that the data preceding the second switch code is the last data of a frame; and resume transmission of said first data stream" as disclosed in claim 30.

5. Additionally, all of the further limitations in claims 2, 5, 6, 9, 10, 11, 32, 12, 33, 34, 35; 14, 17, 18, 19, 20, 36, 37; 38, 39; 31 are allowed since the claims are dependent upon the independent claims.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-

3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<8/12/2009::4Qy09>
/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2419